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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

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03/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,882

Applicant(s)

SIMONS, RICHARD

Examiner

ADITYA S. BHAT

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 29, 30 and 35-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 29, 30 and 35-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 39-40 & 42-45 are rejected under 35 U.S.C. 102(e) as being anticipated by (USPN 7,092,794).

With regards to claim 39, Hill et al. (USPN 7,092,794) teaches a method for determining which of a plurality of HVAC systems will require maintenance, the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (Col.2, lines 15-21)(fig 1)

performing one or more tests on at least selected ones of the HVAC systems in response to the test request, and producing a test result for each of the selected HVAC systems; (Col.2, lines 21-24)

transmitting the test result for each of the selected HVAC systems to a remote location;(Col. 2, line 22)

storing the test results at the remote location; (Col.2, line 25-26)and

identifying which of the HVAC systems will likely need service by analyzing the test results. (Col.4, lines 39-40)

With regards to claim 40, Hill et al. (USPN 7,092,794) teaches a providing different test requests to at least two of the plurality of HVAC systems,(fig1 &7) wherein each test request identifies a different test to perform.(Col. 3, lines 30-33)

With regards to claim 42, Hill et al. (USPN 7,092,794) teaches a scheduling service on at least some of the HVAC systems that have been identified as likely needing service. (Col. 4, lines 41-42)

With regards to claim 43, Hill et al. (USPN 7,092,794) teaches a method of remote testing of HVAC systems comprising the steps of:

transmitting one or more maintenance signals from a remote unit to a specified group of customer HVAC systems, the specified group being a number less than a total number of customer HVAC systems in a customer database; (Col. 2, lines 60-64)

receiving the one or more maintenance signals at each of the HVAC systems, the one or more maintenance signals activating an HVAC component; (Col. 2, lines 25-29)

performing a self-test on the activated HVAC component based on the received one or more maintenance signal; (Col. 4, lines 8-14)

generating self-test result signals from the activated HVAC component based on the self-test preformed on the activated HVAC component; (Col. 2, lines 16-20)

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transmitting the self-test result signals from the HVAC system to the remote unit;
and receiving the self-test result signals from the HVAC systems at the remote unit.

(col.4, lines 8-10)

storing the test results at the remote location. (Col. 4, lines 27-28)

With regards to claim 44, Hill et al. (EP 1 196 003 A2) teaches determining the specified group of customer HVAC systems based on the specified group of customer HVAC systems being within a specified geographic area prior to the step of transmitting the one or more maintenance signals. (figure 6-7)

USER DATABASE

USER NAME	PASSWORD	UNIT 1	UNIT 2	...	UNIT N
CARRIER 1	123456	OFFICE	MILAN	...	FRANCE
CARRIER 2	654321	LOBBY	MILAN	...	

FIG.6

UNIT DATABASE

UNIT NAME	UNIT PHONE #	POWER	MODE	ROOM TEMP	SEIPOINT	FAN SPEED	LOUVER	TIMER	DIAGNOSTIC	ALARM METHOD 1	ALARM DATA 1
OFFICE	(315)555-3456	ON	HEAT	22	22	LOW	1	OFF	NONE	E-MAIL	XYZ@CARRIER.UTC.COM
MILAN	0131234123412	OFF	OFF	23	22	OFF	HOME	OFF	NONE	PHONE	(315)555-1234
FRANCE	5371234512345	ON	COOL	24	22	MEDIUM	6	OFF	NONE	E-MAIL	XYZ@CARRIER.UTC.COM
LOBBY	(315)555-4567	ON	FAN	25	22	OFF	NONE	OFF	ROOM AIR	SMS	(315)555-2345

FIG.7

With regards to claim 45, Hill et al. (EP 1 196 003 A2) teaches determining which customer HVAC systems from the specified group of customer HVAC systems likely

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require maintenance based on the self-test signals received by the remote unit. (see figure 7)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (USPN 7,092,794).

With regards to claim 46, Hill et al. (USPN 7,092,794) does not appear to teach performing maintenance in response to a diagnostic test yielding faulty results.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Hill teaching to include performing maintenance in response to a faulty HVAC unit diagnostic test in order to have the HVAC unit running and providing the service it was manufactured to perform.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20, 29-30, 35-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (USPN 7,092,794) in view of AndelmanLelek (NPL).

With regards to claim 41, Hill et al. (USPN 7,092,794) does not appear to teach charging for services rendered.

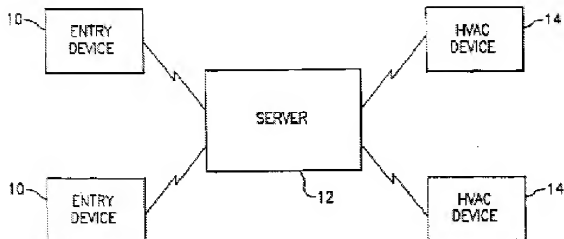
AndelmanLelek (NPL) teaches charging for services rendered.(Page 5, fee section)

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Hill teaching in order to charge for services taught by AndelmanLelek (NPL) as it is commonly known that in order to run a viable business a monetary value must be assigned to services rendered.

With regards to claim 1, Hill et al. (USPN 7,092,794) teaches a method for testing an HVAC system for a building structure from a remote location outside of the building structure, the HVAC system having an active component and a dormant component, the method comprising the steps of:

receiving a test request from the remote location; (Col. 4, lines 8-10)

transmitting the test result to a location outside of the building structure for subsequent analysis, and (Col. 4, lines 14-20)

**FIG.1**

With regards to claims 2 and 4, Hill et al. (USPN 7,092,794) teaches that a component is a heating component or a cooling component. (14;figure 1)

With regards to claim 3 and 5, Hill et al. (USPN 7,092,794) teaches that a component is a cooling component or a heating component. (14; figure 1)

With regards to claim 6, Hill et al. (USPN 7,092,794) teaches the test request is received from a remote computer.(12)

With regards to claims 7-10, Hill et al. (USPN 7,092,794) the test request is received from the remote computer via a telephone line connection, from the remote computer via a wireless connection, from the remote computer via a computer network, from the remote computer via the internet. (Col. 2, line 55-60)

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With regards to claims 11-12, Hill et al. (USPN 7,092,794) teaches a gateway for receiving the test request from the remote computer, and for communicating with the HVAC system wherein the gateway stores one or more tests. (figure 7)

UNIT DATABASE

UNIT NAME	UNIT PHONE #	POWER	MODE	ROOM TEMP	SETPOINT	FAN SPEED	LOUVER	TIMER	DIAGNOSTIC	ALARM METHOD 1	ALARM DATA 1
OFFICE	(315)555-3456	ON	HEAT	22	22	LOW	1	OFF	NONE	E-MAIL	XYZ@CARRIER.UTG.COM
MILAN	0131234123412	OFF	OFF	23	22	OFF	HOME	OFF	NONE	PHONE	(315)555-1234
FRANCE	33/1234512345	ON	COOL	24	22	MEDIUM	6	OFF	NONE	E-MAIL	XYZ@CARRIER.UTG.COM
LOBBY	(315)555-4567	ON	FAIL	25	22	OFF	HOME	OFF	ROOM AIR	SMS	(315)555-2345

FIG.7

With regards to claim 13, Hill et al. (USPN 7,092,794) teaches the gateway submits at least one of the one or more tests to the HVAC system in response to the test request. (Col. 3, line 40-45)

With regards to claim 14, Hill et al. (USPN 7,092,794) teaches a subset of the one or more tests and submits the subset of the one or more tests to the HVAC system in response to the test request. (Col. 3, lines 29-34)

With regards to claim 15, Hill et al. (USPN 7,092,794) teaches the HVAC system includes two or more zones, and the test that is performed activates the primarily dormant component in conjunction with each of the two or more zones. (Col. 2, lines 25-29)

With regards to claim 16, Hill et al. (USPN 7,092,794) teaches transmitting a test request to two or more HVAC systems from the remote location. (see figure 1)

With regards to claim 17, Hill et al. (USPN 7,092,794) teaches the performing step performs a test on the primarily dormant component of the two or more HVAC

systems in response to the test request, and produces a test result for each HVAC system. (see figure 7)

With regards to claim 18, Hill et al. (USPN 7,092,794) teaches the transmitting step transmits the test result for each HVAC system to a location outside of the building structure. (See figure 1)

With regards to claim 19, Hill et al. (USPN 7,092,794) teaches the remote location is the same as the remote location that the test result is transmitted. (see fig 1)

With regards to claim 20, Hill et al. (USPN 7,092,794) teaches the remote location is different than the remote location that the test result is transmitted. (fig 7)

With regards to claims 29 and 30, Hill et al. (USPN 7,092,794) teaches a method for testing an HVAC system for an inside space, the HVAC system having a heating/cooling component, the method comprising the steps of:

receiving a test request that is provided from a location remote from the building(see fig 1)

With regards to claim 35, Hill et al. (USPN 7,092,794) teaches a method for testing a plurality of HVAC systems each in a different building structure or in a different region of a common building structure from a remote location, the HVAC systems having an active component and a dormant component, the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (col. 4, lines 9-10)

performing one or more tests on each of the HVAC systems in response to the test request, and producing a test result for each of the HVAC systems, wherein at least one of the one or more tests that is performed activates and tests one or more of the active or dormant components of an HVAC system; (Col. 4, lines 5-13)

transmitting the test result for each of the HVAC systems to a remote location, (fig 1) and storing the test results at the remote location. (Col. 4, lines 39-40)

With regards to claims 36-38, Hill et al. (USPN 7,092,794) teaches at least one of the one or more tests that is performed activates and tests the active component of the corresponding HVAC system in response to the test request. (Col. 3, lines 30-34)

Hill et al. does not appear to teach performing a test on the dormant component of the HVAC system in response to the test request, and producing a test result wherein the active or dormant component is the heating or the cooling components

AndelmanLelek teaches performing a test on the dormant component of the HVAC system in response to the test request, and producing a test result wherein the active or dormant component is the heating or the cooling components (page 5 seasonal testing paragraph)

It would've been obvious to one skilled in the art at the time of the invention to modify the Hill teaching to include the off season testing taught by AndelmanLelek in order to ensure that the HVAC system was functioning properly before the season change and to minimize/eliminate service interruption.

Response to Arguments

Applicant's arguments with respect to claims 1-20, 29-30 & 35-46 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments that the AndelmanLelek reference does not qualify as prior art under 102(e), applicant is correct. However the reference applies under section 102(a) as it was known to others in this country. Applicant also argues that the AndelmanLelek reference does not teach testing the HVAC unit in a season it would not ordinarily require testing. In response the seasonal testing section recites "For example, if an air handling unit was commissioned during the summer a follow-up test would be performed during the winter for items such as the heating valve and damper controls. These items would have been verified for proper operation during the summer however their stability of control would not have been verified." The claimed invention is believed to read on the prior art of record and therefore the rejection is deemed proper.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baldwin et al. (USPN 5,042,265) teaches controlling HVAC test functions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Aditya Bhat/ February 29, 20008
Examiner, Art Unit 2863